

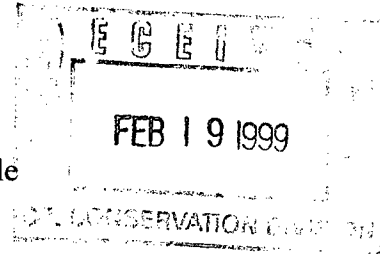


Cross Timbers Operating Company

DHC 3/11/99

Ms. Lori Wrotenbery
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Re: Administrative Approval to Downhole Commingle
Cross Timbers Operating Co.
Bolack "C" LS #14A
2,130' FSL & 980' FEL Sec. 30, T27N, R08W
San Juan County, New Mexico



Dear Ms. Wrotenbery,

Cross Timbers Operating Company hereby request administrative approval to downhole commingle the Blanco Mesaverde and Otero Chacra pools in the above mentioned well. The well was originally completed as a dual completion with the Mesaverde being produced under a packer and up the tubing and the Chacra being produced up the casing. Currently both the Mesaverde and Chacra are producing. Through internal analysis it appears that both zones have been under produced. Most wells in this area (primarily Mesaverde wells) are very susceptible to liquid loading problems. Therefore to improve the recovery of liquids and to improve the ultimate recovery of production, Cross Timbers Operating Company is certain that if both zone are approved for downhole commingle then the above objectives can be obtained.

To comply with New Mexico Oil Conservation Rules, Cross Timbers Operating Co is submitting the following data for your approval of the proposed commingling:

1. C-107A Application for Downhole Commingle
2. C-102 Well Location & Acreage Dedication Plat
3. Production curves for both the Mesaverde & Chacra Formation
4. Offset Operators Plat
5. Well Location Plat

In accordance to New Mexico Oil Conservation Division Rule 303C, all offset operators are being notified of this application. As an offset operator, if you do not have any objections to this application, you do not have to respond to this notification.

If additional information is needed, please feel free to contact Cross Timbers Operating Co.

Sincerely,

Jeffery W. Patton
Production Engineer

CC: NMOCD -Aztec, Offset Operators, BLM

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
811 S. First St., Artesia, NM 88210-2835

DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410-1693

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 875054-6429

Form C-107-A
New 3-12-96

APPROVAL PROCESS:

___ Administrative ___ Hearing

EXISTING WELLBORE

___X___ YES ___ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Cross Timbers Operating Company
Operator

2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401
Address

Lease Bloack "C" LS Well No. #14A Unit Ltr. - Sec - Twp - Rge I 30 27N 08W San Juan County

OGRID NO. 167067 Property Code 022596 API NO. 3004526553 Spacing Unit Lease Types: (check 1 or more)
Federal X State (and/or) Fee

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Otero Chacra 82329		Blanco Mesaverde 72319
2. Top and Bottom of Pay Section (Perforations)	3074' - 3083' (perf'd)		4131' - 4701' (perf'd)
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) 295 psia (calc)	a.	a. 554 psia (calc)
	b. (Original) 935 psia (calc)	b.	b. 820 psia (calc)
6. Oil Gravity (^o API) or Gas BTU Content)	1147 btu		1342 btu / 46.4 API
7. Producing or Shut-In?	Producing		Production
Production Marginal? (yes or no)	yes		yes
* If Shut-In, give date and oil/gas/water rates of last production Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data * If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates:	Date: Rates:	Date: Rates:
	Date: 02/09/99 Rates: 53 mcfpd 0 bwpd 0 bopd	Date: Rates:	Date: 02/09/99 Rates: 62 mcfpd 0 bwpd 1 bopd
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 0 % Gas: 47 %	Oil: % Gas: %	Oil: 100 % Gas: 53 %

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? ___X___ Yes ___ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ___X___ Yes ___ No
Have all offset operators been given written notice of the proposed downhole commingling? ___X___ Yes ___ No

11. Will cross-flow occur? ___ Yes ___X___ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ___ Yes ___ No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? ___X___ Yes ___ No

13. Will the value of production be decreased by commingling? ___ Yes ___X___ No (If Yes, attach explanation)

14. If this well in on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ___X___ Yes ___ No

15. NMOC Reference Cases for Rule 303(D) Exceptions: ORDER NO(S).

16. ATTACHMENTS:
- * C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
 - * Production curve for each zone for at least one year. (If not available, attach explanation.)
 - * For zones with no production history, estimated production rates and supporting data.
 - * Data to support allocation method or formula.
 - * Notification list of all offset operators.
 - * Notification list of working, overriding, and royalty interests for uncommon interest cases.
 - * Any additional statements, data, or documents required to support commingling.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE TITLE DATE 2/19/99

TYPE OR PRINT NAME TELEPHONE NO. (505) 324-1090

All distances must be from the outer boundaries of the Section.

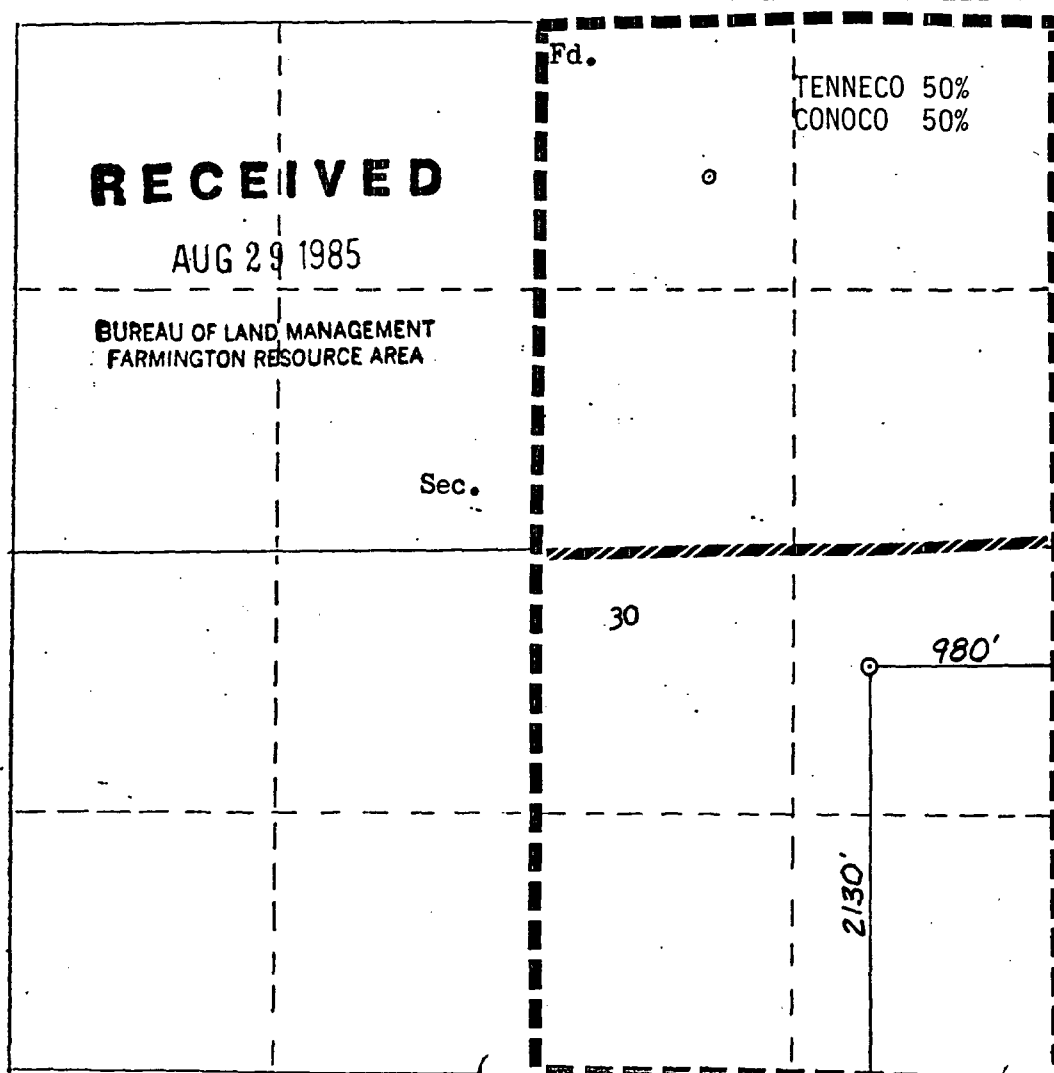
Operator TENNECO OIL COMPANY		Lease BOLACK C LS		Well No. 11A
Unit Letter I	Section 30	Township 27N	Range 8W	County San Juan
Actual Footage Location of Well: 2130 feet from the South line and 980 feet from the East line				
Ground Level Elev: 6127	Producing Formation Chacra/Mesaverde	Pool Undes. CH/Blanco MV	Dedicated Acreage: 160/320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☒ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



Scale: 1"=1000'

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Scott McKinney

Name
Scott McKinney

Position
Sr. Regulatory Analyst

Company
Tenneco Oil Co.

Date
July 2, 1985

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
7-11-85

Registered Professional Engineer and Land Surveyor
118260

Certificate No.
8466

Cross Timbers Oil Company

BOLACK C 14A

CROSS TIMBERS
OTERO (CHACRA)
SAN JUAN, NEW MEXICO
301 27N 08W
BGV

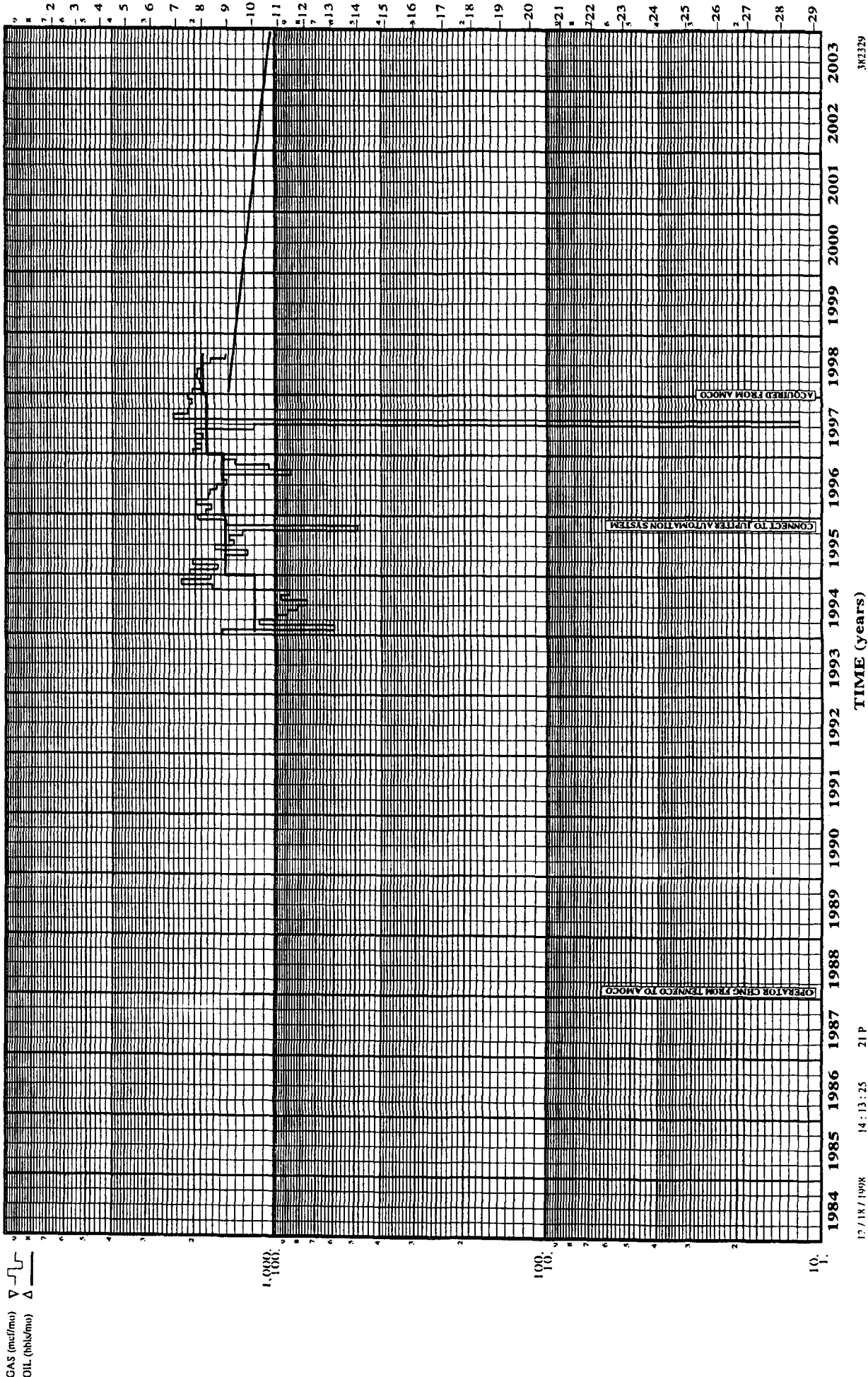
SAN JUAN
70096

CO
382329

M & L - 1/98 FORECAST

JWP DLM CP-K-LDR

Run Date: 03/19/98
Run Time: 10:43:28



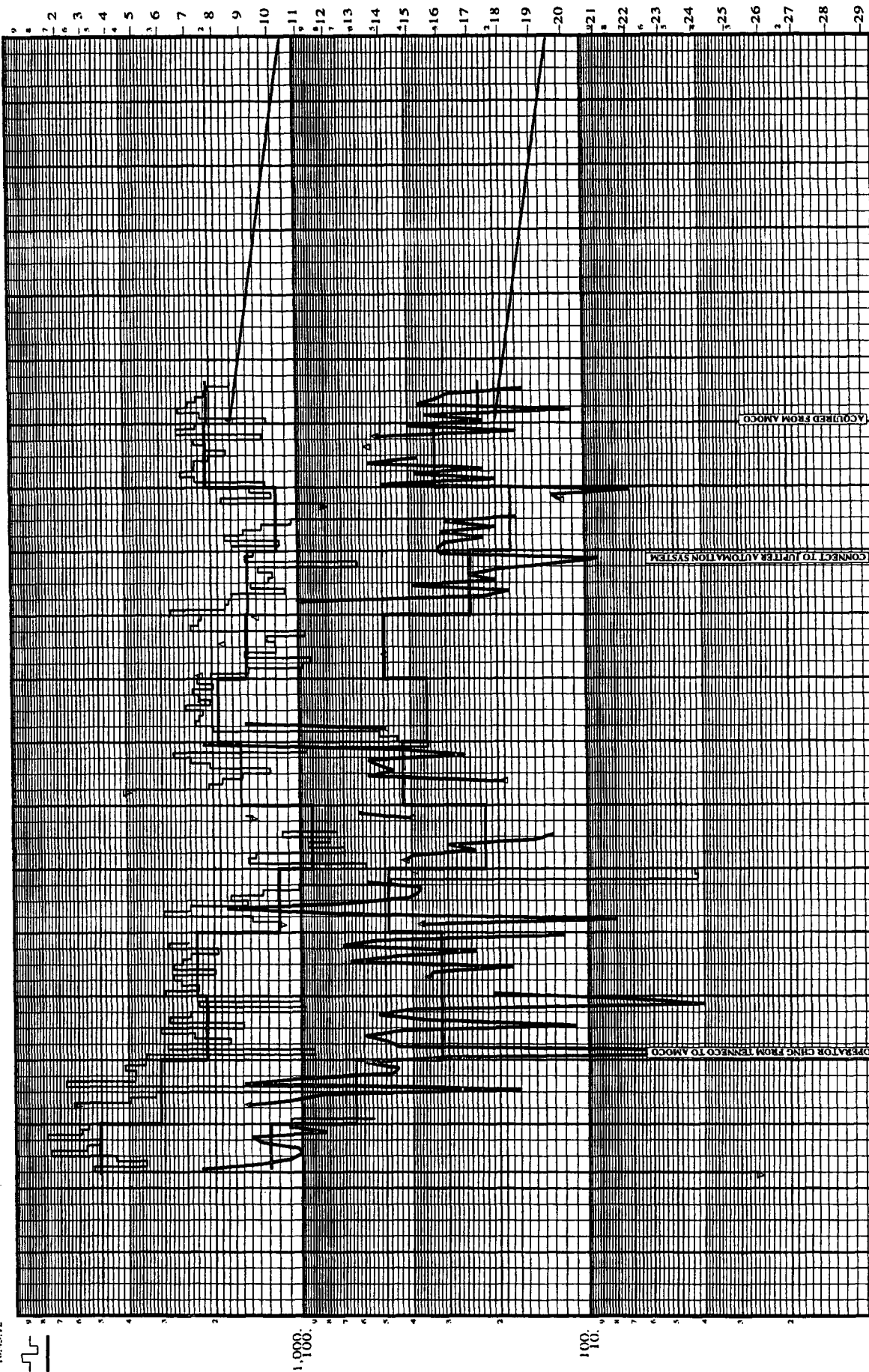
Cross Timbers Oil Company

BOLACK C 14A
 CROSS TIMBERS
 BLANCO (MESAVERDE)
 SAN JUAN, NEW MEXICO
 301 27N 08W
 BGV
 CO
 526553
 JWP DLM CP-K-LDR

M & L - 1/98 FORECAST

Run Date: 03/19/98
 Run Time: 10:43:12

GAS (mcf/mo) ▽
 OIL (bbls/mo) Δ




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Re: Administrative Approval to Downhole Commingle
 Cross Timbers Operating Co.
Bolack C "LS" #14A
 1,640' FEL & 800' FNL Sec. 30, T27N, R08W
 San Juan County, New Mexico

FEB 26 1999

Dear Offset Operator,


As an offset operator to the above mentioned well, you are hereby notified that Cross Timbers Operating Co is filing for downhole commingle approval.

As an offset operator, you have the right to file an objection to the commingling of the above mentioned well within twenty (20) days starting upon receipt of this certified letter. If you do not have any objections to the above well being commingled, you can either sign this letter waiving your rights to an objection or let the twenty days, upon receipt of this letter, expire.

Please return this letter or a letter of objection to Mr. David Catanach at the address listed.

Mr. David Catanach
 New Mexico Oil Conservation Division
 2040 South Pacheco Street
 Santa Fe, New Mexico 87505

Cross Timbers Oil Co sincerely appreciate your prompt response concerning this approval.

Burlington Resources Oil & Gas	Signature:
Greystone Energy	Signature:
Energen Resources	Signature: 



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Santa Fe, New Mexico 87505

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<i>Burlington Resources Oil & Gas</i>	Signature:
<i>Greystone Energy</i>	Signature:
<i>Energen Resources</i>	Signature:



Cross Timbers Operating Company

Bolack "C" LS #14A
Offset Operator / Ownership Plat
Blanco Mesaverde / Otero Chacra
Downhole Commingle

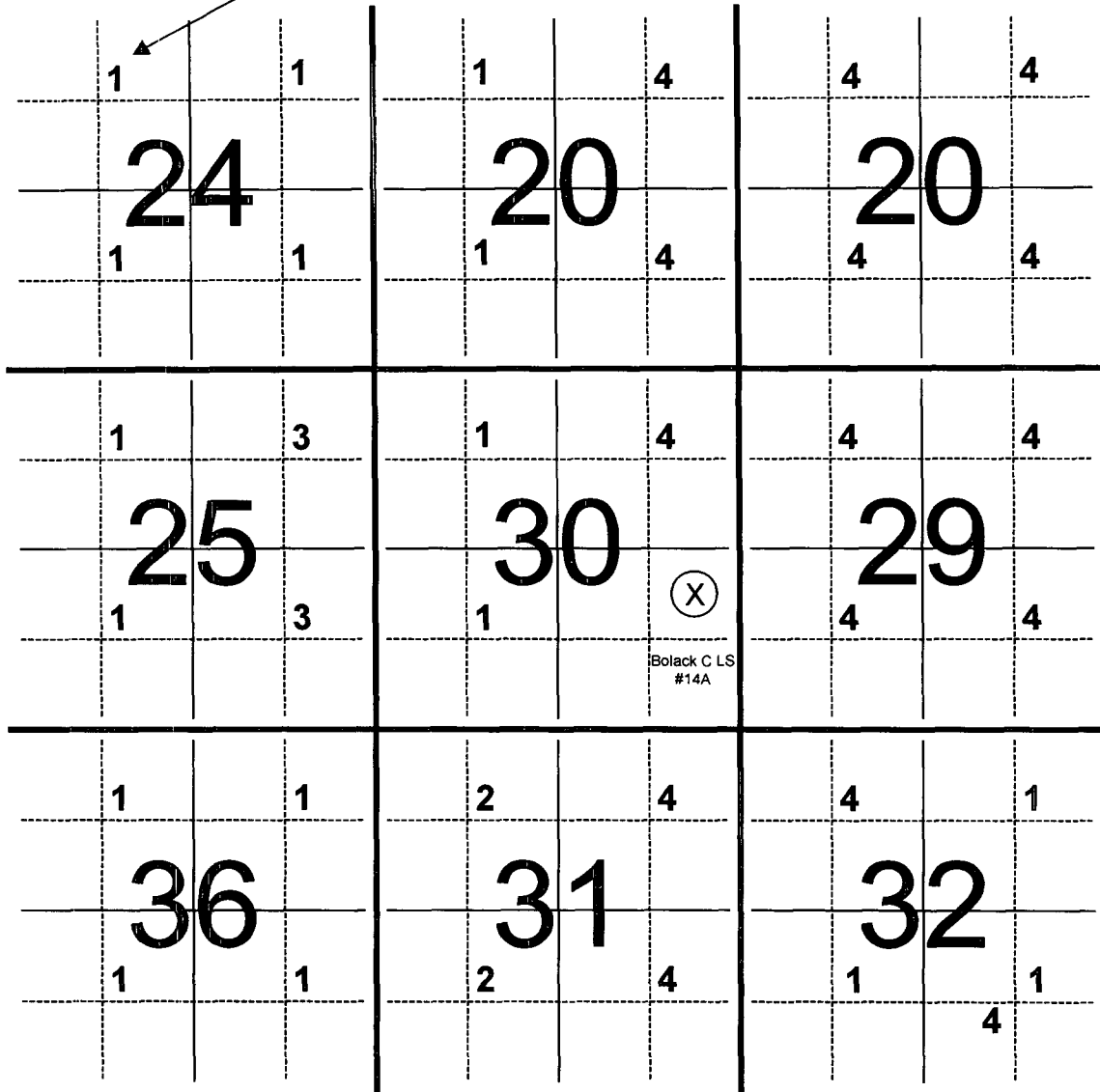
Township 27N, Range 09 W / Township 27 N, Range 08 W

1. Burlington Resources Oil & Gas Company
3535 E. 30th St.
Farmington, NM 87402
2. Greystone Energy
5802 Hwy 64
Farmington, NM 87401
3. Energen Resources
2198 Bloomfield Hwy.
Farmington, NM 87401
4. Cross Timbers Operating Co.
6001 E. Hwy 64
Farmington, NM 87401



Cross Timbers Operating Company

Offset Operator as indicated on previous page



**Township 27N,
Range 09W**

**Township 27N,
Range 08W**

18

17

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15

20

2

35

29

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31

5

33

LAP:
BUD
6
C
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A